

**To:** Zito, Kelly[ZITO.KELLY@EPA.GOV]; Keener, Bill[Keener.Bill@epa.gov]  
**From:** Manzanilla, Enrique  
**Sent:** Fri 4/8/2016 9:34:23 PM  
**Subject:** FW: Exide Update and request (via Keith)  
New Analysis Examines Blood Levels Near Exide

Enrique Manzanilla

Director, Superfund Division

US EPA Region 9 - Pacific Southwest

(415) 972 3843

**From:** Reyes, Deldi  
**Sent:** Friday, April 08, 2016 1:39 PM  
**To:** Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Meer, Daniel <Meer.Daniel@epa.gov>; Lyons, John <Lyons.John@epa.gov>; Calanog, Steve <Calanog.Steve@epa.gov>; Huetteman, Tom <Huetteman.Tom@epa.gov>; Gross, Barbara <Gross.Barbara@epa.gov>; LEONIDO-JOHN, STEVEN <Leonido-John.Steven@epa.gov>; Johnson, Kathleen <Johnson.Kathleen@epa.gov>; Priselac, Adrienne <Priselac.Adrienne@epa.gov>; Serda, Sophia <Serda.Sophia@epa.gov>; Scott, Jeff <Scott.Jeff@epa.gov>  
**Cc:** Jones, Joel E. <Jones.Joel@epa.gov>; Miller, Amy <Miller.Amy@epa.gov>  
**Subject:** RE: Exide Update and request (via Keith)

Attached is DTSC's announcement of the lead study to the Exide Advisory Group.

**From:** Reyes, Deldi  
**Sent:** Friday, April 08, 2016 12:51 PM  
**To:** Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Meer, Daniel <Meer.Daniel@epa.gov>; Lyons, John <Lyons.John@epa.gov>; Calanog, Steve <Calanog.Steve@epa.gov>; Huetteman, Tom <Huetteman.Tom@epa.gov>; Gross, Barbara <Gross.Barbara@epa.gov>; LEONIDO-JOHN, STEVEN <Leonido-John.Steven@epa.gov>; Johnson, Kathleen <Johnson.Kathleen@epa.gov>; Priselac, Adrienne <Priselac.Adrienne@epa.gov>; Serda, Sophia <Serda.Sophia@epa.gov>; Scott, Jeff <Scott.Jeff@epa.gov>

**Cc:** Jones, Joel E. <[Jones.Joel@epa.gov](mailto:Jones.Joel@epa.gov)>; Miller, Amy <[Miller.Amy@epa.gov](mailto:Miller.Amy@epa.gov)>  
**Subject:** Exide Update and request (via Keith)

Thanks, Enrique. (All, at the very end of this note, if you are not already subscribed to the DTSC newsfeed, you can check out their announcement that the legislature has approved the Governor's request of 176 million.) Good news.

Two purposes of this note:

- Heads up that I'll be setting up a check in for us prior to the next Exide meeting, which is set for Apr 28. Purpose is to just compare notes on any Exide related activities you may have been involved in (mostly for my benefit since I'll be at the meeting). You're welcome to send me an email update if you can't make the meeting.
- Convey updates on a few more items of interest, at the top of that list is today's calls that DTSC organized to roll out the DPH blood lead level analysis. See their [News Release](#) and access the study here: - [An Analysis of Children's Blood Lead Levels in the Area Around the Exide Site](#) I sat in on today's call and my notes follow but read the news release for the summary.

### Other Items

- Supervisor Solis meeting with the Administrator is still set for Apr 19. Keith has recommended that the County meet with us either before or just after. Per Keith this would be at the Enrique/Jeff (not Jared) level since this would be Ben Polk, who works for Solis, and others from County Health and County Counsel. ***Keith has asked if we can make that happen.***
- In light of Barry's departure, it's unclear who from South Coast will step up

Deldi's draft notes from today's call, not fact checked against study

The purpose of today's call was to roll out to the Exide advisory committee members, in advance of larger public release the main findings of the study. Ana Mascareñas introduced the topic, summarized the findings, moderated the closing Qs and As. Gina Solomon reviewed the study in more depth.

Purpose of study: 2 fold

Is there a pattern of high blood lead levels around Exide communities and if so how can that inform clean up prioritization

Basis of study: 12K blood lead level test results (of children under six) annually that are required to be electronically reported to DPH. Only DPH can access full details. Study time frame was 2012 because this was Exide's last full year of operations.

Geographic focus and levels of comparison: Neighborhoods up to 4.5 miles from Exide composed of 100 census tracts, comparison to LA County overall.

Threshold: 4.5 mg/dl of blood (challenge that various labs report different cut-offs)

Findings:

100 census tracts

BLL in kids under 6 near Exide are higher than those farther away

And also higher than children in LA county overall

Lead in housing also appear to play a significant role.

DTSC mission to clean up regardless of level of blood lead level, acknowledge need to clean up soil before children are contaminated.

Gina S.:

The blood lead testing program is state wide and based on CA law that requires publicly supported programs, i.e., WIC or MediCAL to provide BLL testing of children at 12 months or 24 months of age or anytime up until age 6. If not in a such a program, health care providers are required to ask about potential exposures and test if deemed necessary.

All test results are required by law to be electronically reported to CA DPH. This also applied to the smaller study done by LA County. DPH has access to the repository, Cal/EPA and DTSC does not but requested the analysis.

About 700K tests are reported annually on about 650K kids (some kids get tested more than once).

In year 2012, most recent year for which DPH has reliable QC'd data and last year of Exide operations.

Lead does not linger for years, more for several months.

Looked at different cut-offs for lead as a continuous variable, going down to very low levels, but not possible b/c of reporting differences among labs. For this analysis the cut off is equal to or greater than 4.5 mg/dl blood (DPH equivalent of 5) and this is the the current CDC reference level. Reliable data above and below.

This study looked at 8 zip codes around Exide and all census tracts (100) within these zip codes.

With regard to distance (from Exide):

within one mile of Exide, 3.58 percent of kids under age 6 had at least 4.5 mg/dc of lead in blood

between 1.5 to 4 miles, it was 2.41 percent

in LA County overall, it is 1.59 percent

Other factors considered: direction from Exide, sex of child, (boys more at risk) age, age of housing

Within each of these variables, significant effect with age, sex and age of housing (and housing was looked at in a couple of ways: median year built and proportion of housing before 1950, 1940 and 1980).

In direction analysis, significant effect found:

Areas to north and west were where highest rates of kids levels found

East, southeast, rates were about same as LA county background

Challenge – are there interactions between various factors

Multivariate analysis – age of housing highly statistically significant

The LA County assessor's office obtained individual age of housing data for every child in the area with a BLL greater than 4.5.

There were over 300 kids in this category who were compared to a similar group that did not have high levels. Again, age of housing significant and distance barely discernable. But direction still significant, areas to north and west of Exide higher than other areas, also higher to east. Surprised to see higher levels to the west but that area is highly industrial.

Report is dense. Lots of tables but these are useful b/c each census tract laid out in table 1

Univariate – distance and direction

Multivariate – table 4, output of logistic regression model

Questions from Call Participants

Teresa Marquez, we were told that most contaminated area was north and south, now it sounds like northwest is most contaminated? What about 1.7 mi boundary?

Air monitoring / modeling predicted based on wind patterns established the 1.7 mi boundary.

Blood lead data just shows us where the kids live who have higher levels. Complicated b/c it's not just Exide sourced, but from a variety of sources. Re finding that areas to the west had higher levels was a bit of a surprise to us as well, those are fairly industrial sources.

No change to 1.7 mi boundary, that's most reliable for soil lead levels.

Andrea Hricko

There are 700K tests done annually in the State. How did they compare to the rest of the county.

Answer

1.59 percent is the average overall for the entire county (includes the 12K kids but many more).

Ana: the 1.7 mi area was determined as well by DTSC soil sampling data based on for example, antimony levels.

Mark Lopez, EYCEC, please recap stats

Answer

3.58% w/in 1 mile

2.41% between 1 and 4.5 mi from Exide

1.95% County overall

What about access to healthcare and rate of testing

Yes all kinds of questions about how complete the lead testing data for CA overall. Not something we can control except that DTSC has been very concerned about making blood lead level testing available to community and made Exide pay for it. And County is doing specific outreach for it. DTSC does not have access to individual test results but if families want to come with us with that data, we welcome it.

County cut off is higher: one BLL of 20 or 2 of 15 in a child. State would considers those needing to be investigated.

You identified north and west, what about the northwest? Residents still concerned about impacts beyond 1.7.

Yes, it includes the northwest.

What about northeast?

Yes, most of the affected areas are closer to Exide, and elevated levels too

**From:** Manzanilla, Enrique  
**Sent:** Thursday, April 07, 2016 4:31 PM  
**To:** Meer, Daniel <[Meer.Daniel@epa.gov](mailto:Meer.Daniel@epa.gov)>; Lyons, John <[Lyons.John@epa.gov](mailto:Lyons.John@epa.gov)>; Calanog, Steve <[Calanog.Steve@epa.gov](mailto:Calanog.Steve@epa.gov)>  
**Cc:** Huetteman, Tom <[Huetteman.Tom@epa.gov](mailto:Huetteman.Tom@epa.gov)>; Reyes, Deldi <[Reyes.Deldi@epa.gov](mailto:Reyes.Deldi@epa.gov)>  
**Subject:** FW: DTSC News Feed

See item on Exide...

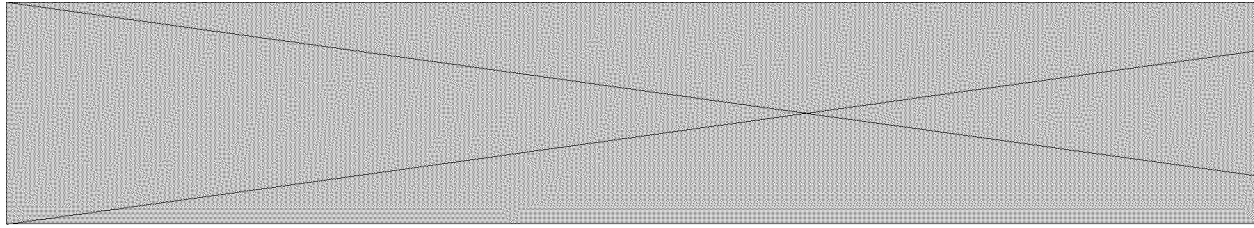
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**From:** Department of Toxic Substances Control  
<[departmentoftoxicsubstancescontrol@dtsc.ccsend.com](mailto:departmentoftoxicsubstancescontrol@dtsc.ccsend.com)> **On Behalf Of** Department of  
Toxic Substances Control  
**Sent:** Thursday, April 07, 2016 4:16 PM  
**To:** Manzanilla, Enrique <[Manzanilla.Enrique@epa.gov](mailto:Manzanilla.Enrique@epa.gov)>  
**Subject:** DTSC News Feed



DTSC News Feed is a weekly email that pulls together short updates and internet links to keep you informed about the latest accomplishments and news highlights at the California Department of Toxic Substances Control (DTSC).

**april 7, 2016**

- The State Senate approved the \$176.6 million funding bill Governor Brown proposed to fund the expedited and expanded testing and cleanup of residential properties around the former Exide facility in Vernon. See coverage from [EGP News](#) and [The Washington Times](#).
- U.S EPA has proposed adding the [Argonaut Mine Site](#) in Jackson to the Superfund National Priority List. DTSC installed a [storm water diversion system](#) in November 2015 at the 100-year old Argonaut dam to help direct storm water around the tailings.
- DTSC's [schools program](#) is setting the gold standard for making properties safe.
- More than 700 properties have been sampled near the Exide facility in Vernon. See the latest cleanup numbers [here](#).

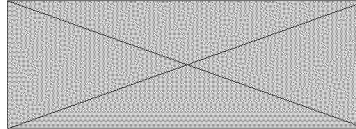
Archived versions of DTSC News Feed can be found on the department [website](#).

If you would like to receive DTSC News Feed, a weekly email that pulls together short updates and internet links to keep you informed about the latest accomplishments and news highlights at the State Department of Toxic Substances Control, please [subscribe here](#).

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